

541,129

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
28 April 2005 (28.04.2005)

PCT

(10) International Publication Number
WO 2005/037521 A1

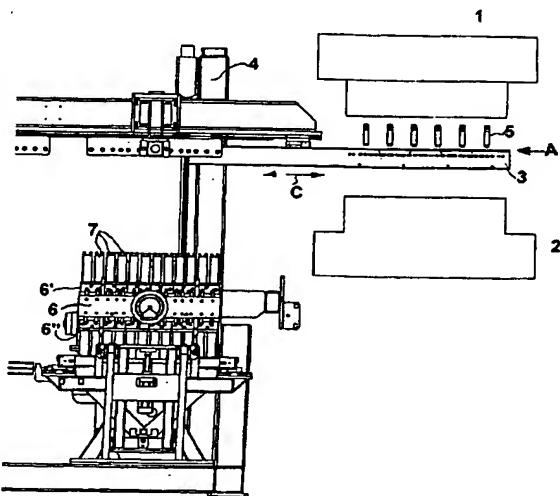
- (51) International Patent Classification⁷: **B29C 45/72**, (45/17, 35/16, 49/64, 31/00)
- (74) Agent: **GERVASI, Gemma; Notarbartolo & Gervasi S.p.A.**, Corso di Porta Vittoria 9, I-20122 Milan (IT).
- (21) International Application Number: **PCT/EP2004/052439**
- (22) International Filing Date: 5 October 2004 (05.10.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
RM2003A000460 7 October 2003 (07.10.2003) IT
- (71) Applicant (for all designated States except US): **S.I.P.A. SOCIETA INDUSTRIALIZZAZIONE PROGETTAZIONE E AUTOMAZIONE S.P.A. [IT/IT]**; Via Caduti del Lavoro 3, I-31029 Vittorio Veneto (IT).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **ZOPPAS, Matteo [IT/IT]**; Via S. Pellico, 46, I-33074 Fontana Fredda (IT). **CORAN, Massimo [IT/IT]**; Via Colombo 32, I-31027 Spresiano (IT). **PAVANETTO, Jader [IT/IT]**; Via Martiri Di Marzabotto, 94, I-30174 Mestre (IT).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: INJECTION DEVICE AND PROCESS FOR PLASTIC OBJECTS



WO 2005/037521 A1

(57) Abstract: A plastic preforms (5) moulding device and process comprising an injection mould, containing a plurality of injection cavities, an arm (3) for extracting the preforms (5) from the mould, equipped with guillotine-like gripping elements, which moves between the existing space between the half moulds when in the open position in order to grasp the preforms and the external position, a cooling turret (6), with the faces housing a group of cups (7) for the conditioning of the preforms (5), which effects a rotational movement around a horizontal axis and a vertical translation movement between the high position under the extraction arm to receive the preforms and the low position corresponding to the extraction table of the preforms (5), on which are indented longitudinal slots with teeth shaped constrictions in order to grasp the preforms under the ring (9) and to extract them from the cups (7).



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.